

The background of the slide is a dark field filled with a dense pattern of small, semi-transparent dots. These dots are arranged in a way that they form a large, irregular circular shape in the center. The dots are colored in a gradient: red and orange at the top, transitioning through yellow and green on the right, and then into blue and purple on the left and bottom. The overall effect is a vibrant, pixelated or halftone-like pattern.

ARCHITECTURE FOR THE MASSES

bringing architecture awareness to
a much broader audience, inside
and outside of the enterprise

CRAIG MARTIN - COO & CHIEF ARCHITECT, ENTERPRISE ARCHITECTS

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Agenda

- › Context Setting - Utility 7 Differentiation.
- › Disruptive business models
- › Disruption in the Education Industry
- › Why is this important to business
- › Education Industry Business Models
- › Some MOOC theory
- › Why did EA decide to go MOOC
- › Breakdown the EA MOOC modules
- › Next Steps

Strategic Relationship With Corporate Clients

- Strategy & Architecture Capability Improvement
- The delivery of strategic architecture outcomes
- Architecture delivery Accelerator Frameworks
- Resourcing & Talent
- Managed Services

Enterprise Services



Learning Services



Skills Uplift for Organisations & Individuals

- TOGAF® 9.1 Certification
- ArchiMate® 2.0
- Advanced / Applied EA
- Business Architecture
- Information Governance
- Solution Architecture
- BPMN

Lifetime Relationship with Practising Architects

- Practitioner career lifecycle management
- Architecture training and certification
- Professional development
- Community involvement
- PAYG payroll services
- Learning forums



Architect Services



Thought Leadership

Championing Practice Awareness in the Community

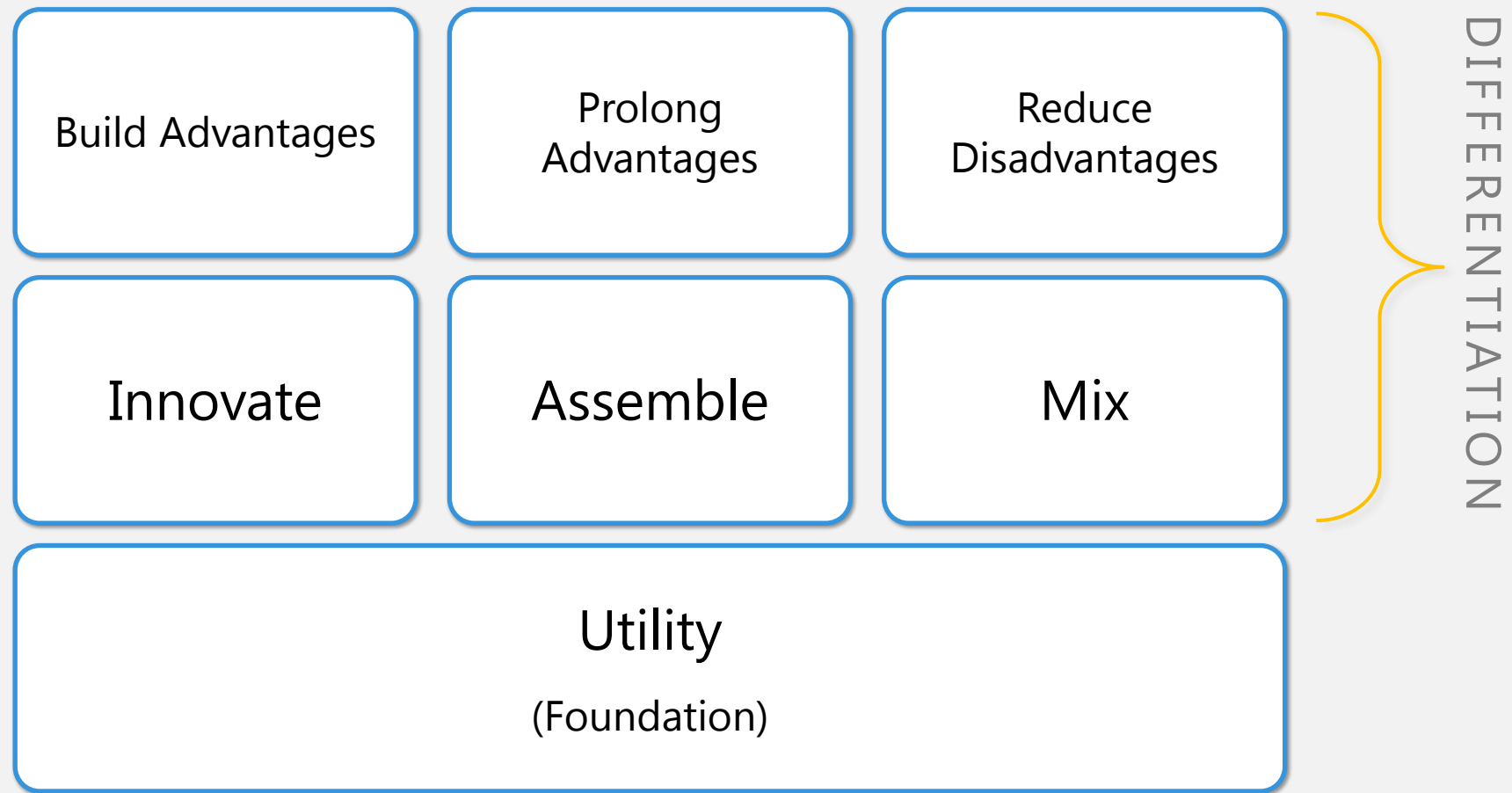
- Chief Architect / CTO Round Tables
- Virtual Teaming & Practitioner Collaboration
- Open Group Participation
- Industry Engagement

EA is a leading international provider of strategy and architecture services and capabilities



Our experience in higher education

What's Business About?

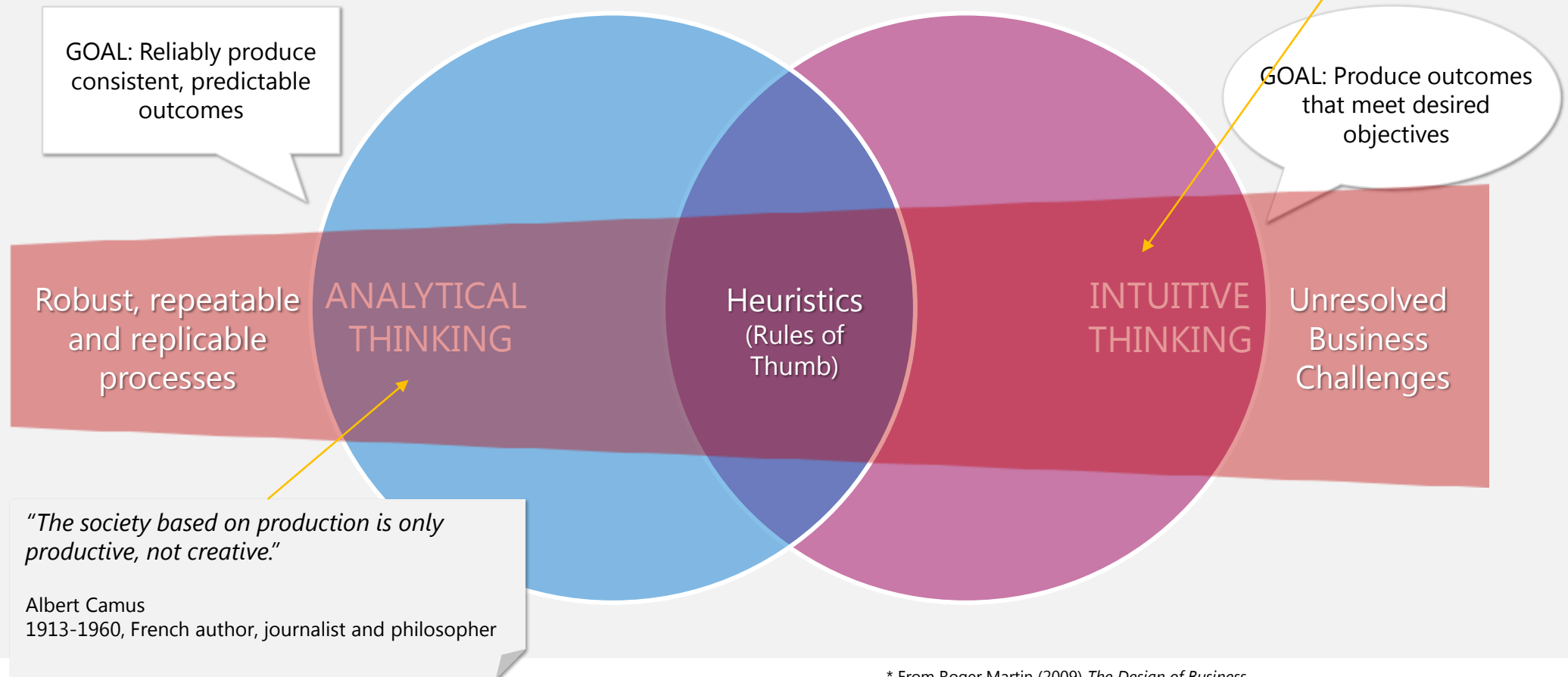


Where does value lie in business?

True value lies in a balance of intuitive and analytical skills

"All knowledge is connected to all other knowledge. The fun is in making the connections."

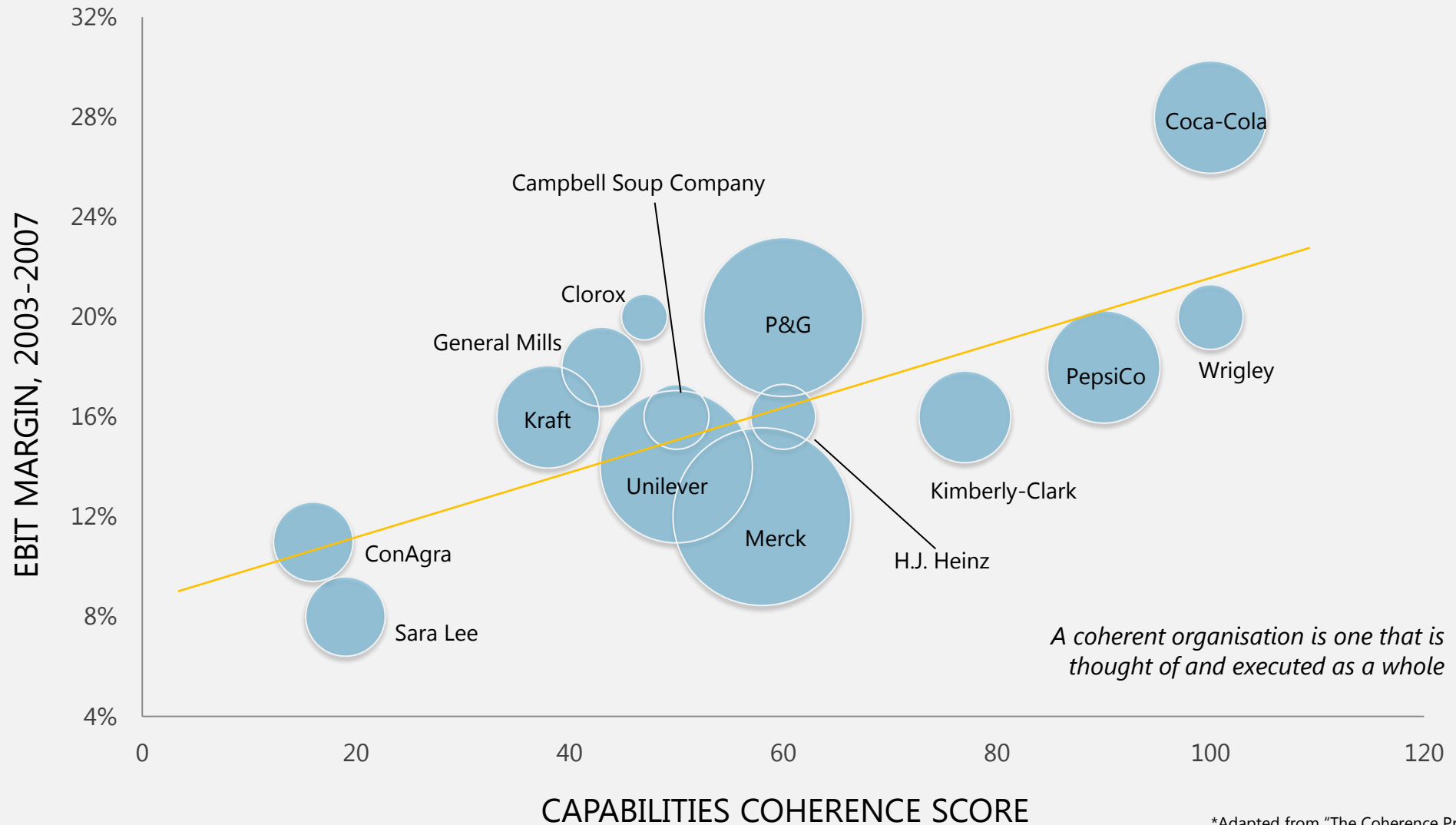
Arthur Aufderheide, Palaeopathologist and expert on dissecting mummies



* From Roger Martin (2009) *The Design of Business*

True value comes from those who can innovate, mix and assemble the best

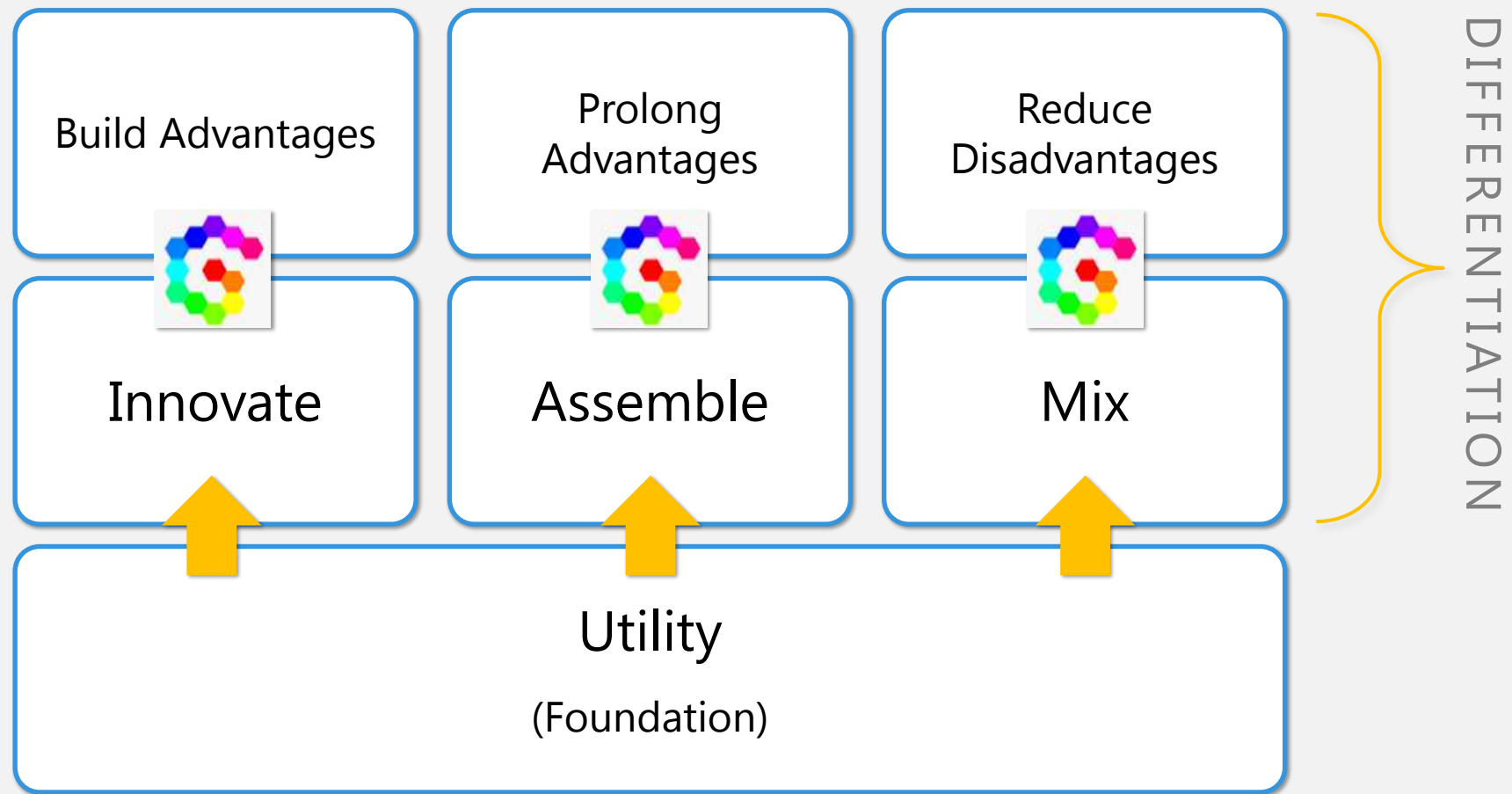
Companies with a high level of cohesion affect EBIT directly



*Adapted from "The Coherence Premium"
Harvard Business Review, June 2010

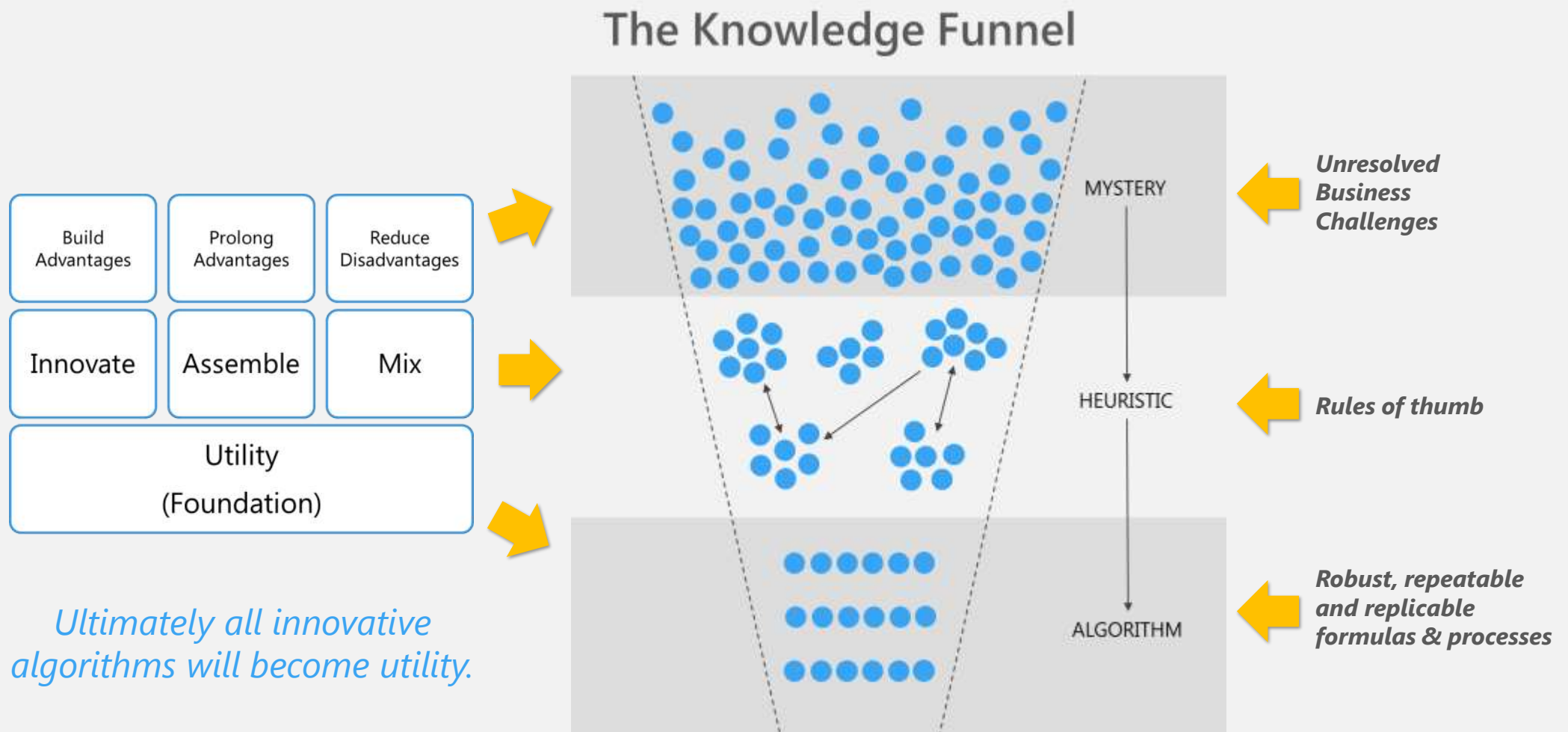
But you still need the utility

It's the utility that allows you to build better mixes



Finding the right business mixes

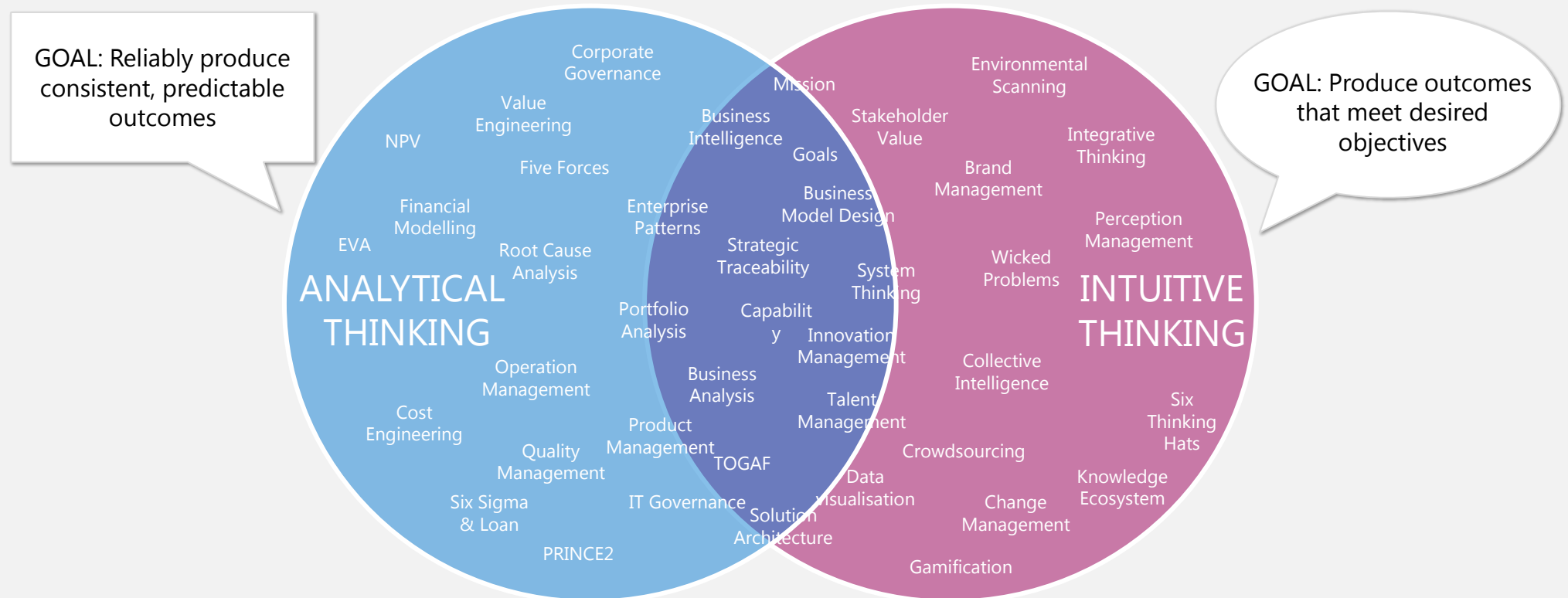
The Challenge is reducing the time it takes to move from the unresolved business challenges space to the repeatable formulas space. The realm of methods and frameworks



* From Roger Martin (2009) *The Design of Business*

Finding the right skills

The challenge is also identifying the right skills in the organisation that are able to traverse the domains of innovative intuitive thinking, and reliable analytical thinking.

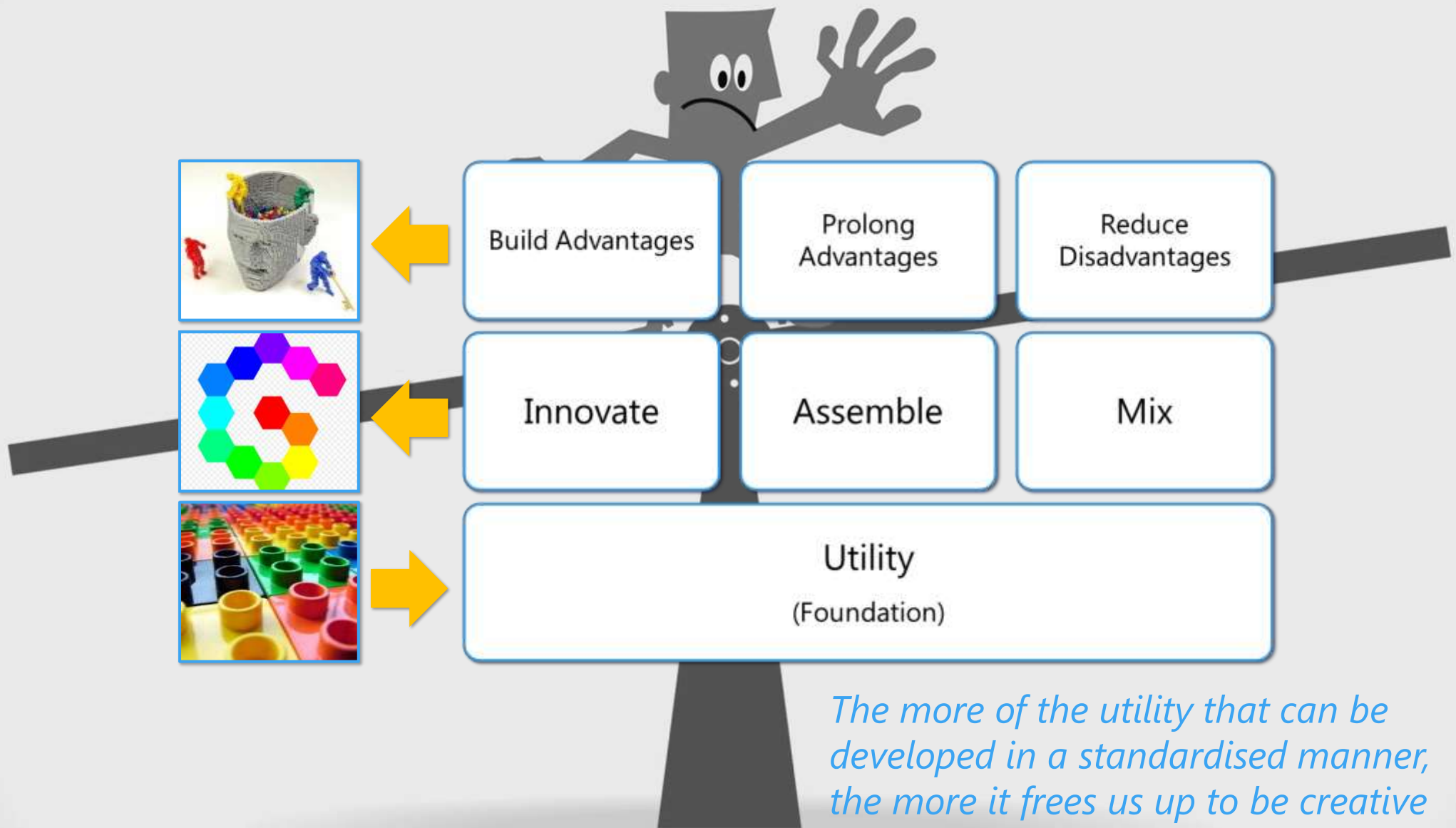


* From Roger Martin (2009) *The Design of Business*



Creating the right balance of skills in an organisation is a recipe for success

Orchestrating the balance



Orchestrating the balance

An abstract graphic on the left side of the slide, composed of numerous small, semi-transparent circles. These circles are arranged in a way that they form a large, irregular shape, possibly resembling a stylized letter 'E' or a cluster of points. The colors of the circles transition from dark purple and blue on the left, through green and yellow, to orange and red on the right, creating a vibrant, multi-colored effect against the black background.

Mixing differently
creates disruption

Prediction...

“ This ‘telephone’ has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us. ”

WEST UNION INTERNATIONAL MEMO. 1876

Disruptive Business Models

Prediction...

“ I have travelled the length and breadth of this country and walked with the best people, and I can assure you that data processing is a fad that won't last out the year. ”

THE EDITOR OF MANAGEMENT BOOKS AT PRENTICE-HALL, 1957

Disruptive Business Models

Prediction...

“ I think there is a world market for
maybe five computers. ”

THOMAS WATSON, CHAIRMAN OF IBM, 1943

Disruptive Business Models

Prediction...

“There is no reason why anyone would want a computer in their own home.”

KEN OLSEN, PRESIDENT AND FOUNDER OF DIGITAL EQUIPMENT CORP, 1977

Disruptive Business Models

Prediction...

“ You can't offer a product for free for too long and survive, it's a passing fad. ”

TELCO CEO WHEN ASKED HIS OPINION ON SKYPE


Disruptive Business Models

Prediction...

“ There's no way offering free online training will work, there's no business model there ”

ANONYMOUS... (SORT OF)

Disruptive Business Models

- 
- › Innovation that creates a new market
 - › Innovation that creates a new value network
 - › Eventually disrupts an existing market and value network
 - › Displaces an earlier offering or technology

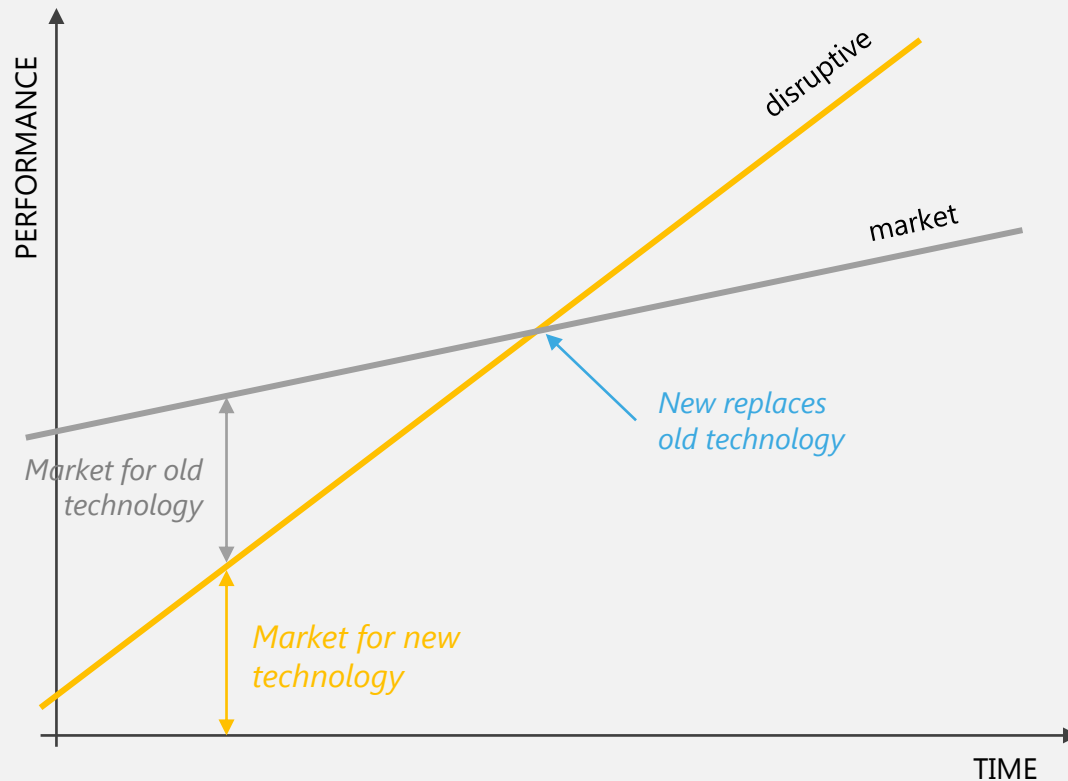
EXAMPLES OF DISRUPTIVE BUSINESS MODELS:

- » Apple and their reduced switching costs and increased barriers to entry
- » Nespresso and their recurring revenues model
- » Dell and their “earn before you spend” model
- » Facebook and their “getting others to do the work” model
- » Xerox and the pay per use model
- » Google and the micro-advertising model
- » Amazon and their long tail model

What is disruption?

When does disruption occur?

Disruptive technologies take a while to change the market



- › First stage of disruption, an innovator makes a product much more affordable and simpler to use (for the user) than what currently exists.
- › The second stage of disruption is when additional technological change is added which makes it simpler and less expensive to build and maintain the products.
- › The new change eventually displaces the existing market and value network, resulting in a radical improvement in performance

Christensen, Clayton M. (2010-09-06).
Disrupting Class, Expanded Edition: How Disruptive Innovation Will Change the Way the World Learns

RED OCEAN

- ✓ Compete in existing markets
- ✓ Beat the competition
- ✓ Explore existing demand
- ✓ Make the value/cost trade-off
- ✓ Align with differentiation OR low cost

BLUE OCEAN

- ✓ Create uncontested markets
- ✓ Make competition irrelevant
- ✓ Create & Capture new demand
- ✓ Break value / cost trade-off
- ✓ Align with differentiation AND low cost

Why does disruption occur?

Why is disruption required in education?

MOTIVATION? RELEVANCE?
AUTHENTICITY?

- › Turned off to school
- › Focused on passing the next test
- › Not excited by the classroom
- › No application to life after school
- › Discouraged from following their own interests
- › Knowledge = gradual accumulation of right answers acquired through effort and obedience to the instructor
- › Role of the instructor is to TEACH them
- › Right answers for everything exist

From an article by Roger Shank,
Engines for Education



Why is disruption required in education?

TRADITIONAL CLASSROOM

- › Prescribed Curriculum
- › Whiteboards
- › Desks in rows
- › Books and worksheets
- › Paper & pencil
- › Focus on the front (teacher)
- › Read, take notes
- › Study as an individual
- › Take tests to measure learning

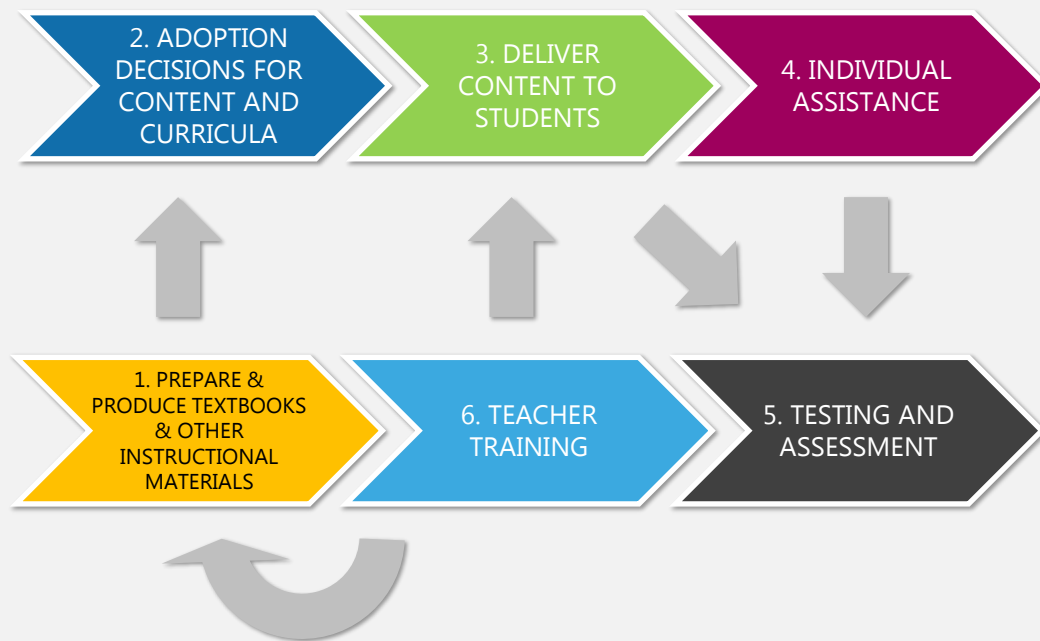
From an article by Roger Shank,
Engines for Education



Why is disruption required in education?

Traditional education's present value network is largely a VAP business

Value Added Processes (VAP) businesses model



- › These companies bring inputs of materials into one end of their premises, transform them by adding value, and deliver higher-value products to their customers at the other end.
- › Most schools and universities currently operate like a VAP business.
- › Students are herded into a classroom at the beginning of the school year, value is added to them, and they're promoted to the next grade at year's end.
- › It's a form of mass production on an assembly line

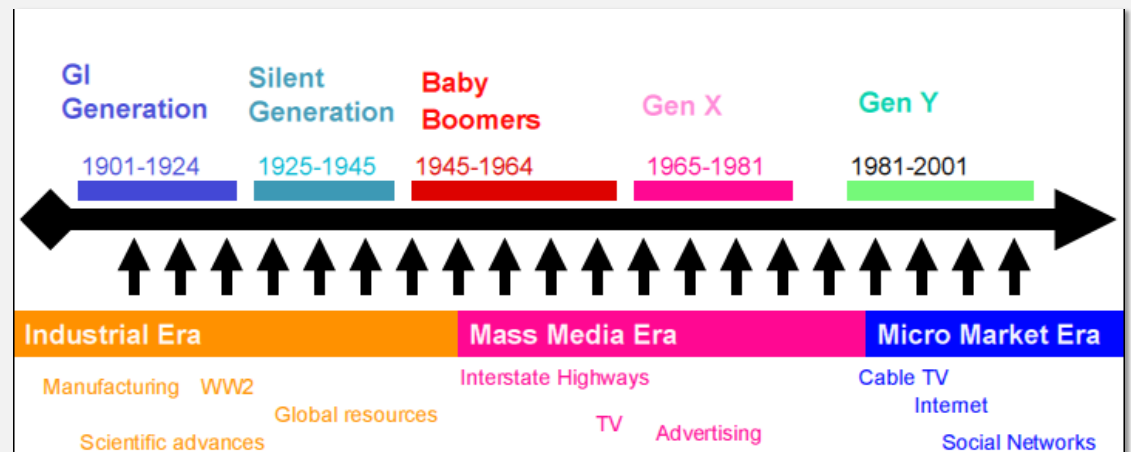
*Øystein Fjeldstad and Charles Stabell



CHANGE IS NEEDED?

A new generation is entering the workforce

- › Lack trust in corporations and government
- › Focus on personal success
- › Have a short-term career perspective
- › Gets easily bored
- › Extremely independent
- › See no clear boundary between work and life
- › Empowered and optimistic
- › Sacrifice economic rewards for work-life balance
- › Expect to work anytime, anyplace
- › Connect with people in new and distinctive ways
- › Comfortable with globalization
- › Racially and culturally diverse



* The Consumer Insights ThinkTank

A new generation is entering the workforce

- › Generation Y is plugged-in 24 hours a day, 7 days a week
- › Willing to trade high pay for fewer billable hours, flexible schedules and a better work/life balance.
- › Generation Y is confident, ambitious and achievement-oriented. They have high expectations of their employers, seek out new challenges and are not afraid to question authority.
- › Generation Y wants meaningful work and a solid learning curve.
- › They value teamwork and seek the input and affirmation of others. Part of a no-person-left-behind generation, Generation Y is loyal, committed and wants to be included and involved.
- › Generation Y craves attention in the forms of feedback and guidance. They appreciate being kept in the loop and seek frequent praise and reassurance. Generation Y may benefit greatly from mentors who can help guide and develop their young careers.
- › Gen Y is not just "online"...it is more complex than that... they switch ON and OFF - while X wear online more as a badge - Y is more sceptical
- › Beyond the push button paradigm of Boomer interaction Y technology is an extension of them.



25%

Generation Y is currently 25%
of the workforce

Can

CHANGE

47%

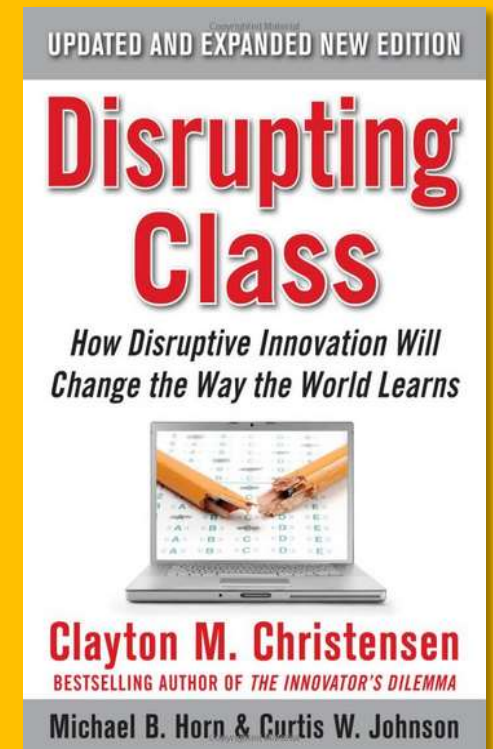
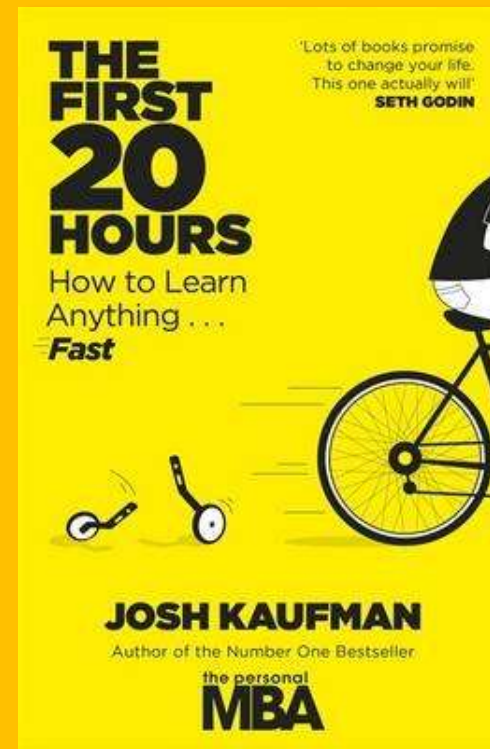
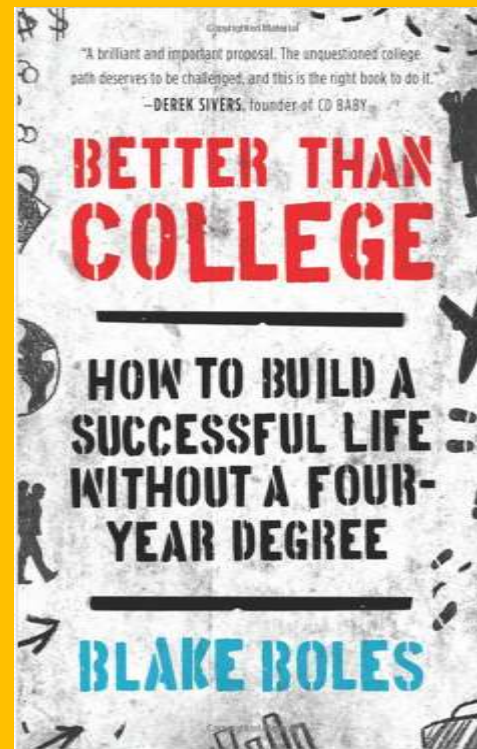
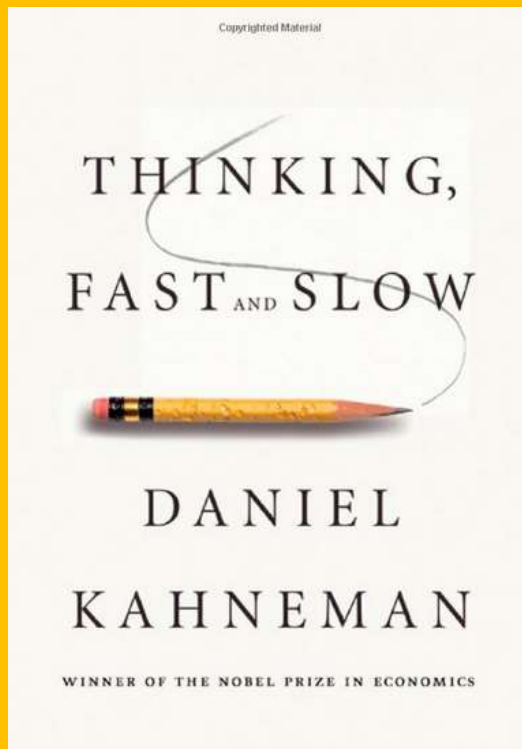
and is projected to be 47%
of the workforce by 2014.

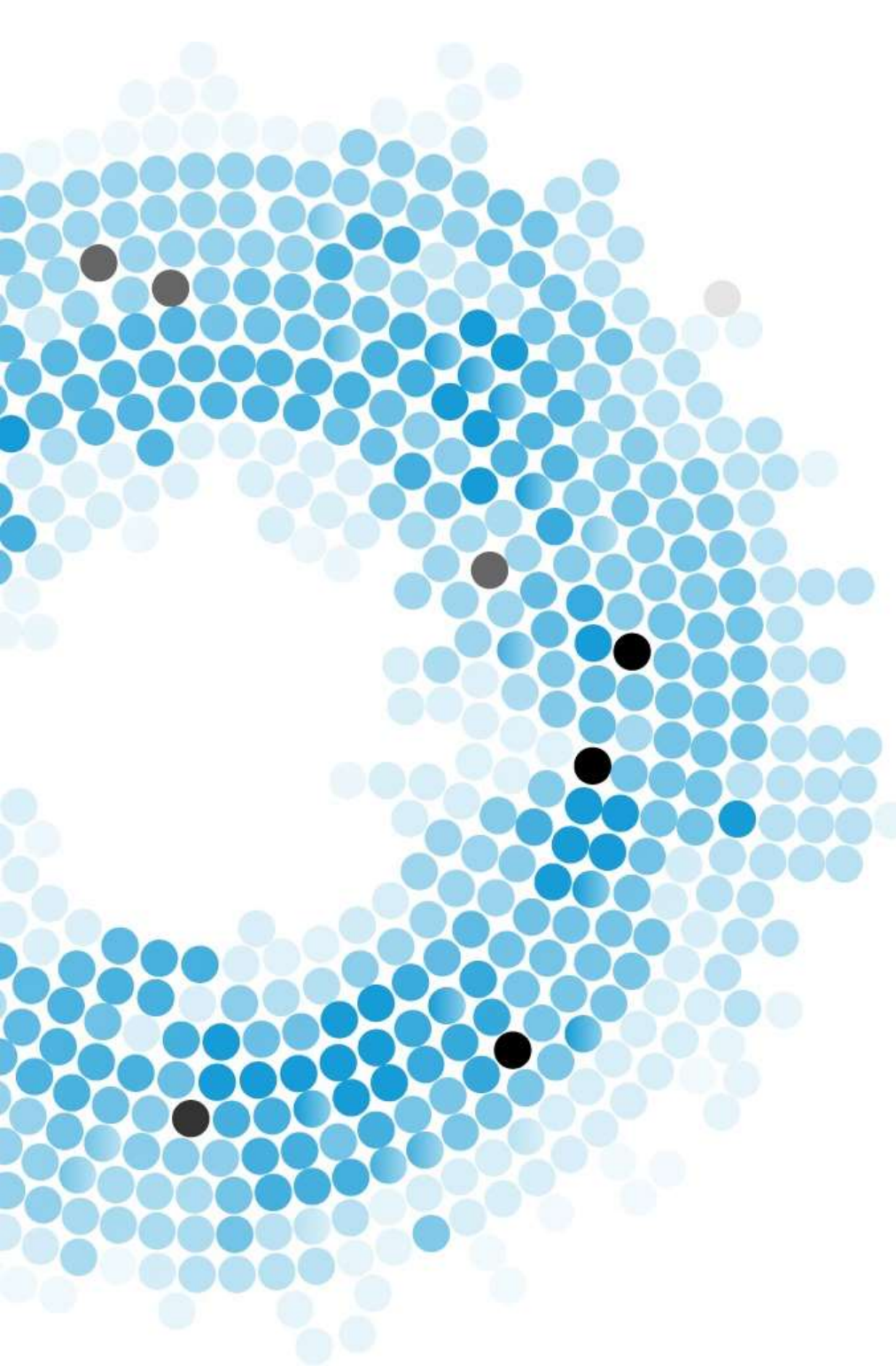
“ The problem isn't that Johnny can't read. The problem isn't even that Johnny can't think. The problem is that Johnny doesn't know what thinking is; he confuses it with feeling. ”

THOMAS SOWELL

An incorrect view of the next generation

The world of education is changing





STAGE 2

DISRUPTION IS

OCCURRING

technological change is added which makes it simpler and less expensive to build and maintain products



SOLUTION SHOPS

- › Employ experienced, intuitively trained experts whose job is to diagnose problems and recommend solutions.

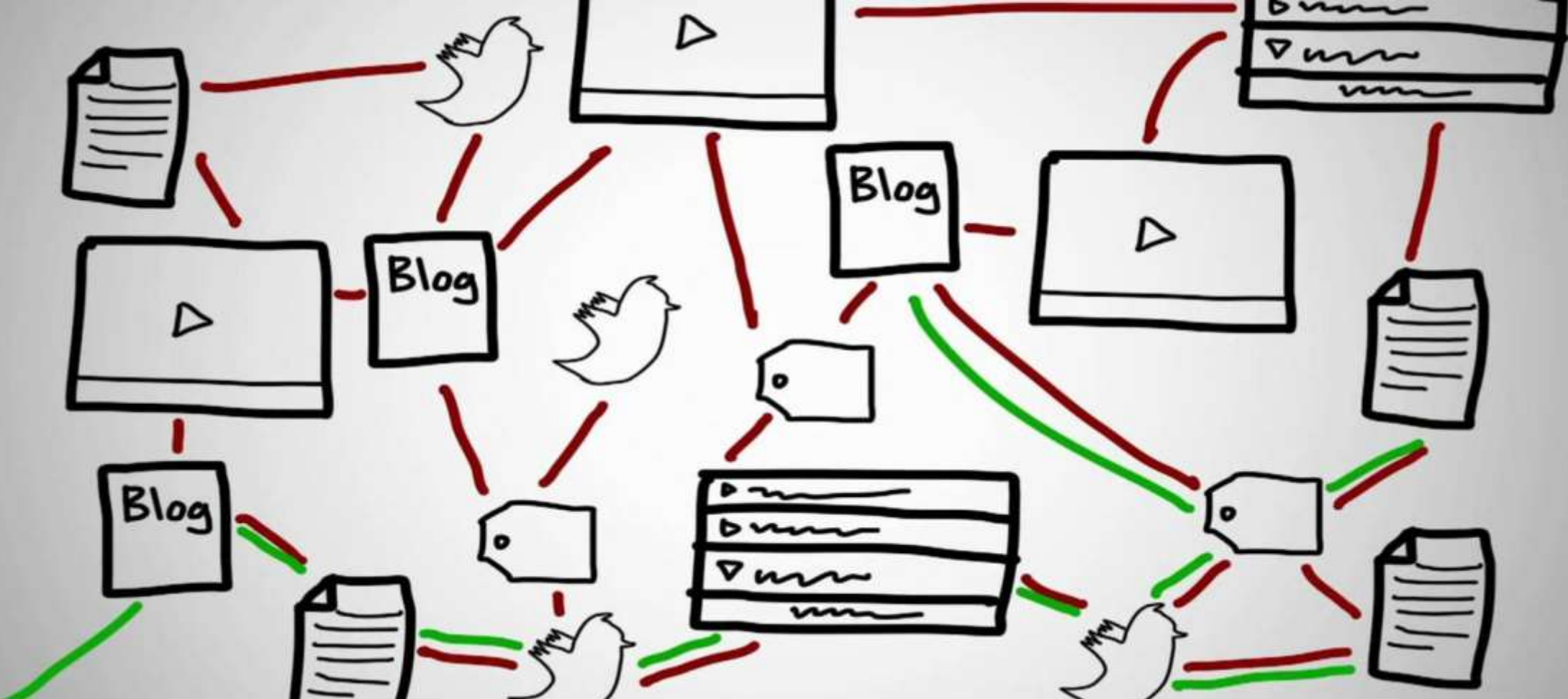


FACILITATED NETWORKS

- › Customers exchange with each other.
- › Participation in the network typically isn't the primary profit engine for participants.
- › Rather, the network is a supporting infrastructure that helps the buyers and sellers make money elsewhere.
- › The company that makes money in a facilitated network is the one that facilitates the network.

Education Disruption

This has opened up the space for other value networks in education



Education Disruption

- › It is rare for a disruption to appear in just one part of a value network without the rest of the system changing, too.
- › When a disruption arises, a new value network almost always emerges to replace the existing one if the disruption is to be successful.
- › The reason the whole value network must be replaced for a disruption to occur is that, in each stage, the actors' business models, economic incentives, and rhythms of innovation and technological paradigms are consistent and mutually reinforcing.
- › Companies with disruptive economics simply are not plug-compatible with the old value network.
- › What this means is that the entire system for creating education materials, making the decisions about which materials to adopt, and delivering the content to students must, and will, change.
- › It is this second stage of disruption in public education that will cause the world to "flip" and make student-centric online technology a reality.



But first....lets look
at some isms

Def_Connectivism

“ The theory of learning which emphasizes the role of the **social** and cultural context opposed the individual. Central to connectivism is the relationship between work experience, learning and knowledge, as expressed in the concept of '**connectivity**', thus the root of the theory's name. Emphasises the learners ability to **navigate** the information. The Pipe is more important than the content within the pipe ”

GEORGE SIEMENS & STEPHEN DOWNES

Knowing how to find information is becoming more important than knowing the information

Def_Constructivism

“A theory to explain how knowledge is constructed in the human being when information comes into contact with existing knowledge that had been developed by experiences. To **generate** knowledge and meaning from your **own experience** and interactions. Knowledge cannot be “transmitted”

ELIZABETH MURPHY

Learners must create own meanings based on individual experiences and interactions

The Old Value Network

**Knowledge
held by a few**

**“Knowledge cannot be
held by the few - In vain
have you acquired
knowledge if you have not
imparted it to others.”**

**DEUTERONOMY RABBAH
(C.900, AN HOMILETIC COMMENTARY ON THE
BOOK OF DEUTERONOMY)**

The New Value Network for Education

**Knowledge held
by the many**

**“Knowledge is like money:
to be of value it must
circulate, and in circulating
it can increase in quantity
and, hopefully, in value.”**

**LOUIS L'AMOUR
(1908-1988, AMERICAN AUTHOR)**

Education Disruption

What do the isms mean for disruption?

Education Disruption

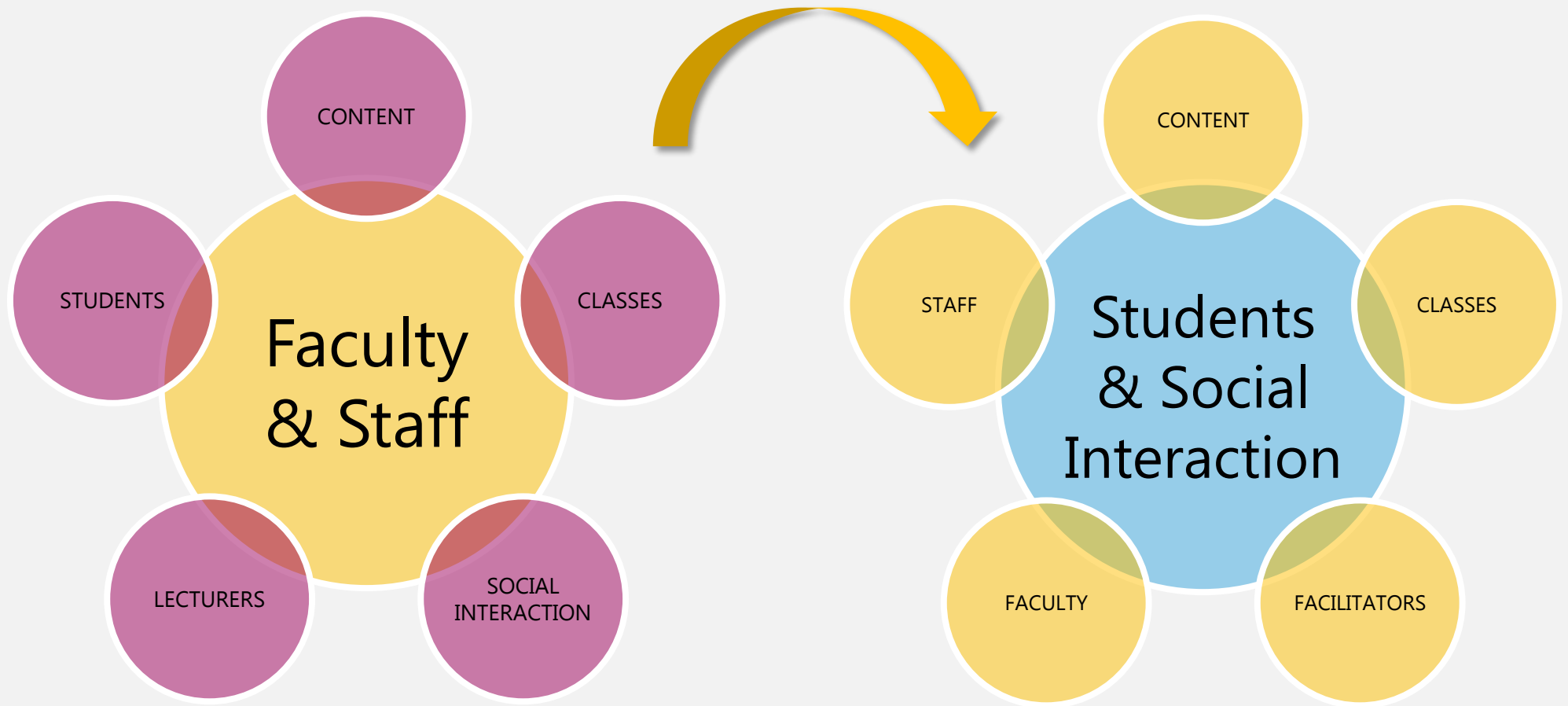
What will this facilitated value network look like?

- › Platforms that facilitate the creation of **user-generated content**.
- › **Simple** to develop online learning products that students will be able to **build products** that help them **teach other students**.
- › Parents will be able to **assemble** tools to tutor their children.
- › Teachers will be able to create tools to help the **different types** of learners in their classrooms.
- › Rather than being “pushed” into classrooms through a centralized selection process, they will be **pulled** into use through self-diagnosis—by teachers, parents, and students.
- › Facilitated networks, not VAP businesses, will be the business models of distribution.
- › Ultimately, people will assemble learning modules together into entire courses whose approach is truly **student-centric—custom-configured to each different type of learner**.

Connectivism + Constructivism = The facilitated value network

The student centric classroom

The disruption will alter the entire value chain and place the student at the centre



The student centric classroom

The Disruption Journey

- › For several years, most teachers and students will still have **conventional** textbooks.
- › But little by little, textbooks will give way to computer-based online courses—increasingly augmented by **user-generated student-centric learning tools**.
- › The second, or student-centric, stage of this disruption will move to the mainstream when users and teachers start piecing together enough tool modules to create entire courses **designed for each type of learner**.
- › At some point, administrators, education committees, and unions will recognize that even without explicit administrative decisions ever having been made, **student-centric learning has become mainstream**.
- › Analysis done by Clayton Christensen, suggests that this will happen in approximately 2014, when online courses have a **25 percent market share**
- › The Disruption is more about the **role of the teacher** than the change to the classroom
- › Instead of spending most of their time delivering one-size-fits-all lessons year after year, teachers can spend much more of their time traveling from student to student to help **individuals with individual problems**.

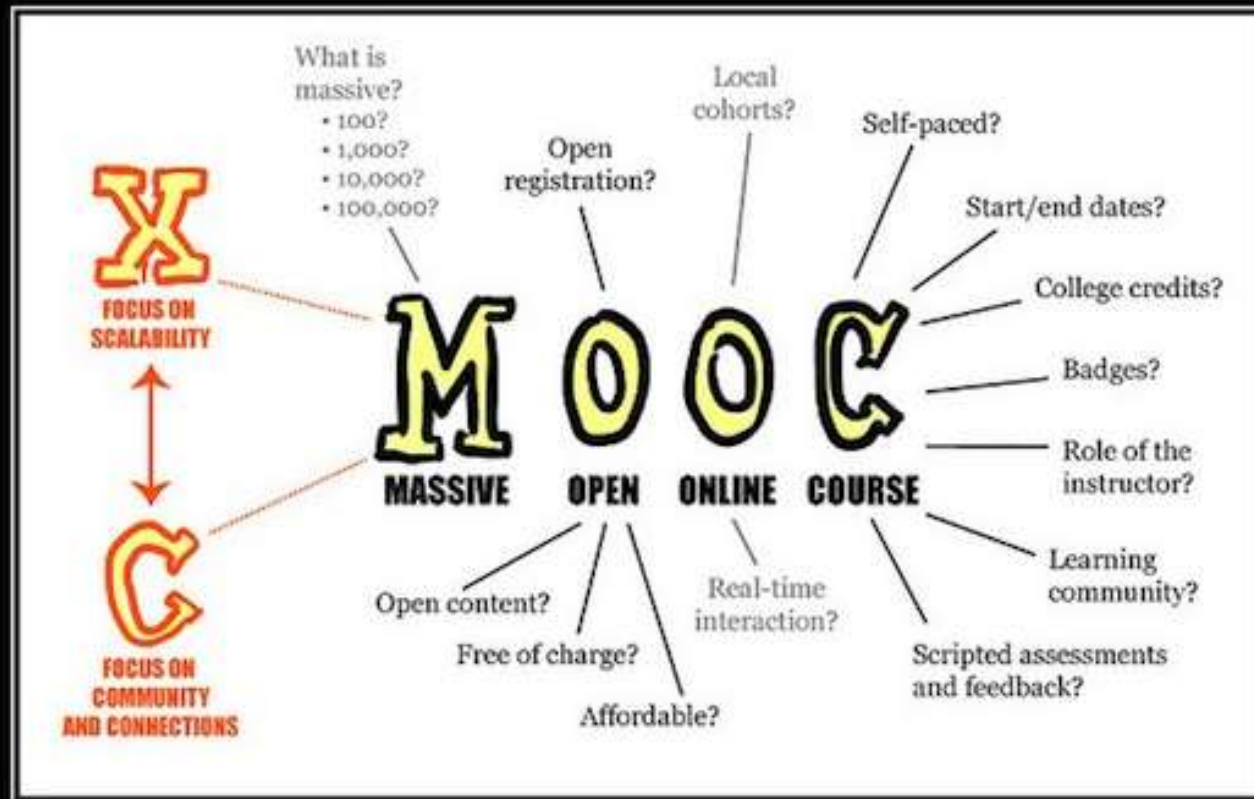
The student centric classroom

The Disruption is more about the role of the teacher than the change to the classroom

- › Instead of spending most of their time delivering one-size-fits-all lessons year after year, teachers can spend much more of their time traveling from student to student to help individuals with individual problems.
- › Teachers will act more as learning coaches and tutors to help students find the learning approach that makes the most sense for them.
- › They will mentor and motivate them through the learning with the aid of real-time computer data on how the student is learning.
- › This means, however, that they will need very different skills to add value in this future from the skills with which education schools are equipping them today.
- › Since customization will be a major driver and benefit of this shift to student-centric online technology, increasingly teachers will have to be able to understand differences in students and be able to provide individual assistance that is complementary to the learning model each student is using.
- › Because student-centric technology allows for far more personalized attention from a teacher, we can do something counterintuitive in education—increase the number of students per live teacher.
- › Facilitating this disruption of instruction has the potential to break the expensive trade-offs in which school districts have been trapped so that individual teachers can do a better job and give individual attention to more students.
- › As a result, there potentially will be more funds to pay teachers better.

MOOC






M ♦ O ♦ O ♦ C

Every letter is negotiable.

What is a MOOC?



"As soon as I had to prepare for class and teach it, I understood it!"

In teaching others we teach ourselves.
TRADITIONAL PROVERB

Enter the cMOOC's

A cMOOC is a version of a student centric facilitated network

- › cMOOC = Connectivist MOOC
- › Learners are encouraged to contribute actively, using these digital platforms.
- › Participants' contributions in form of blog posts, tweets etc. are aggregated by course organizers and shared with all participants via daily email or newsletter.

Participants from all over the world can connect share, contribute, collaborate to learn and expand their network professionally and personally.

- › cMOOCs are also open and flexible, responsive to needs of its participants which can provide a tailored learning experience.

Enter the xMOOC's

An xMOOC is a more traditional value network model

- › xMOOC is content related not social related – pushed out to people and not students creating content as in cMOOC
- › Rather than a group of individuals building the course as in a cMOOC, an xMOOC usually has one or more higher education colleges or schools behind it, and, in some cases, a for-profit company
- › Udacity/Coursera/edX are referred to as examples of xMOOCs



MOOCS are still traversing the disruption curve

Disruption across the industry is still a work in progress

cMOOC

xMOOC





Why are Universities turning to MOOCs

SINCE THERE IS NO SIGNIFICANT BUSINESS MODEL (YET)

- › Getting on Board
- › Reach new audiences
- › Influence students who may enrol in their institution.
- › Attracted students from around the world and “feeder schools”
- › Brand building



BROKERAGE FEE

ASSESSMENT FEE

RECRUITMENT FEE

PLATFORM FEE

POSSIBLE BUSINESS MODELS

ADVERTISING FEE

CONTENT FEE

REFERRAL / FEEDER FEE

Why are Universities turning to MOOCs

A woman with long dark hair, wearing a white shirt, is sitting at a wooden desk in a library, looking down at an open book. The desk is lit by a large, ornate brass lamp with a white dome shade. In the background, many other similar lamps and desks are visible, creating a sense of a large, quiet study space. The right side of the image is overlaid with a semi-transparent dark area containing text.

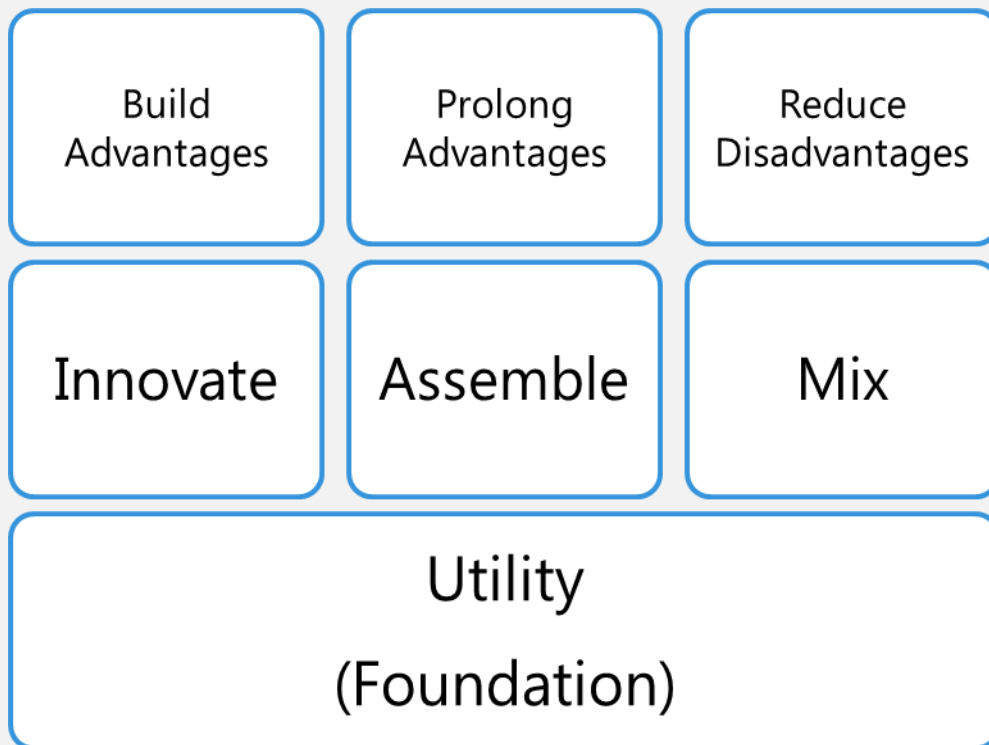
What is it Like to Study in MOOC?

MY OWN EXPERIENCE

- ✓ Learning vs. certifying
- ✓ Synchronous vs. Asynchronous
- ✓ Mobile vs. PC
- ✓ Seamless vs. Disjointed
- ✓ Constructivism and Connectivism

Why is Enterprise Architects interested in MOOCS?

Our Journey to the isms



- › We are developing some disruption of our own
- › Understanding of the foundation frees you up to focus on differentiation
- › The architecture discipline has been around for a while - the rate at which it shows value must accelerate
- › TREND: SIMPLER - We need to make architecture simpler
- › We want to enable the business mixers
- › Provide the tools for connectivism and consutructivism

“ In today’s environment, hoarding knowledge ultimately erodes your power. If you know something very important, the way to get power is by actually sharing it. ”

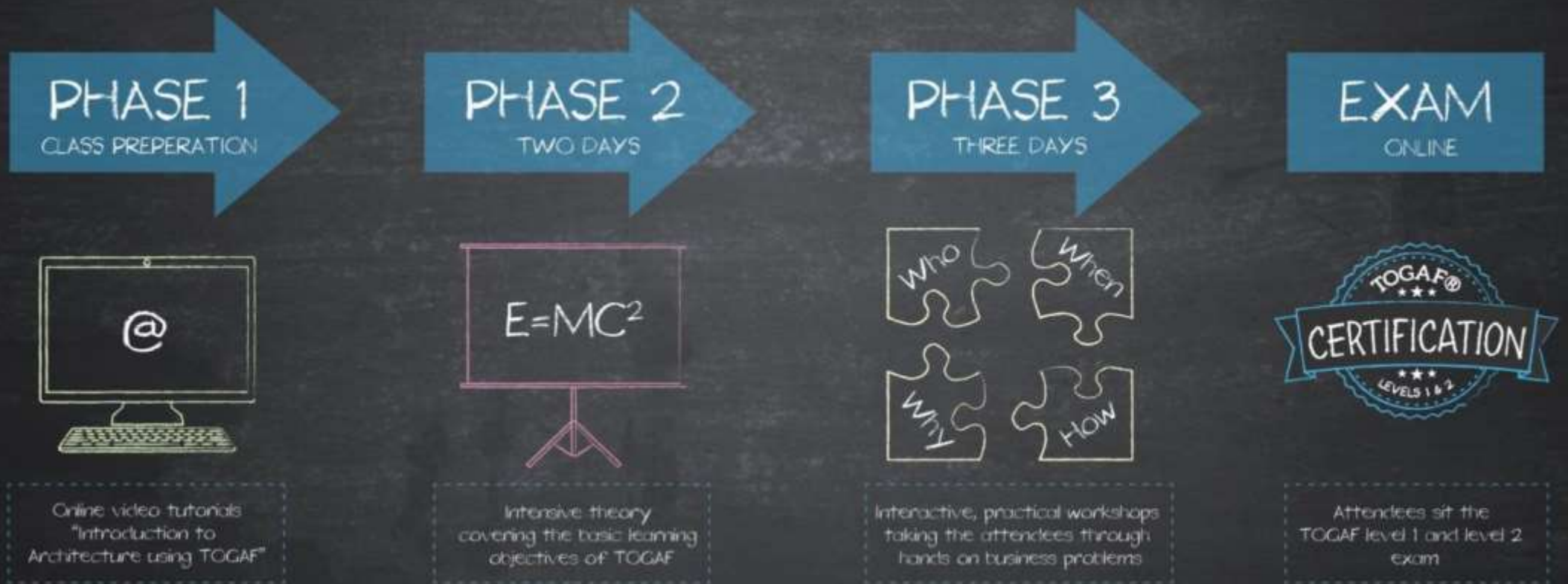
*JOSEPH L. BADARACCO
(*1948, PROFESSOR OF BUSINESS ETHICS AT HARVARD BUSINESS SCHOOL)*

Keeping knowledge erodes power.
Sharing is the fuel to our growth engine.

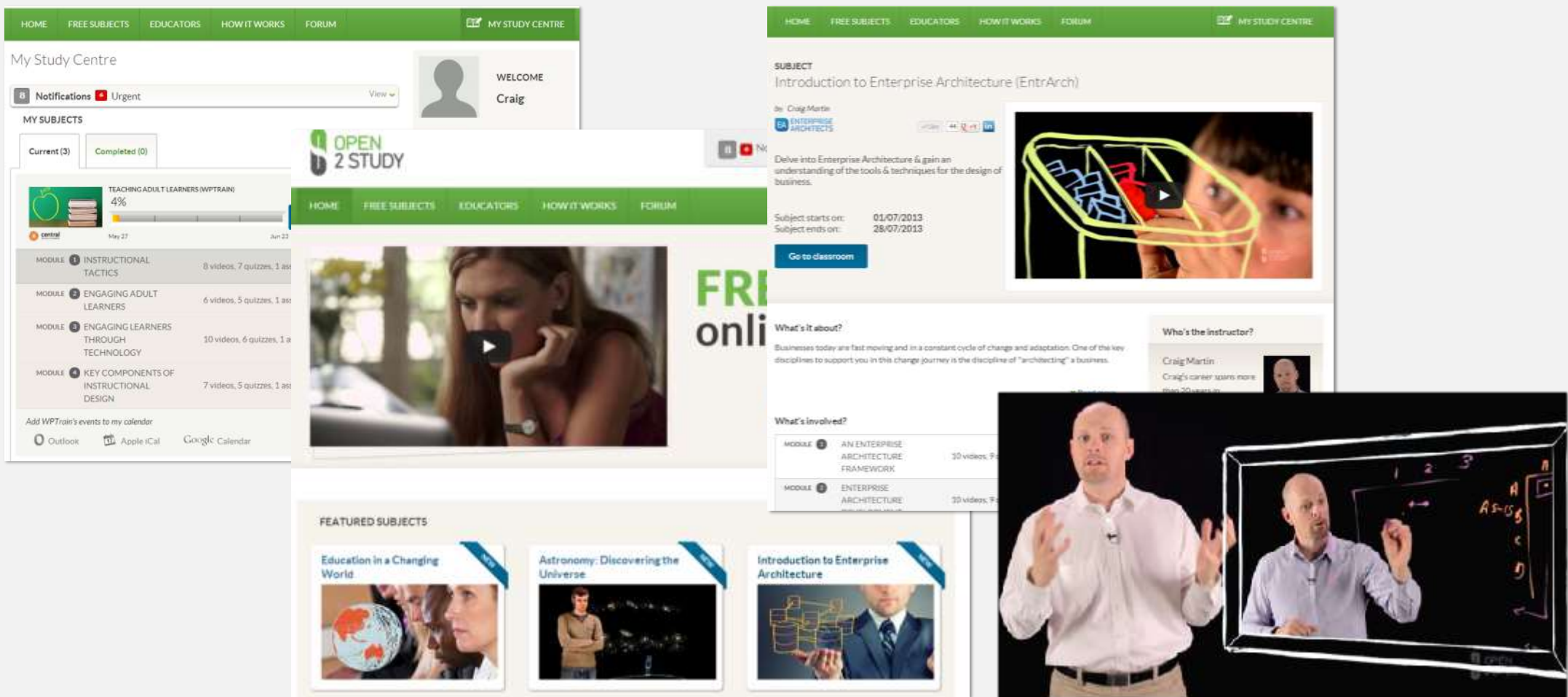
What has EA done?

68 000 VIEWS AND COUNTING





The creation of hybrid models



Phase 1 – xMOOC

(SYNCHRONOUS, "FACULTY" DRIVEN
AND CONTENT DRIVEN)

Introduction to Architecture
using TOGAF

- › The course is targeted at non-architects to give an overview of the architecture discipline and the TOGAF framework
- › Attendees will be required to view 40 instructional videos over 4 hours
- › Each video is 4-8 minutes long with

an assessment question

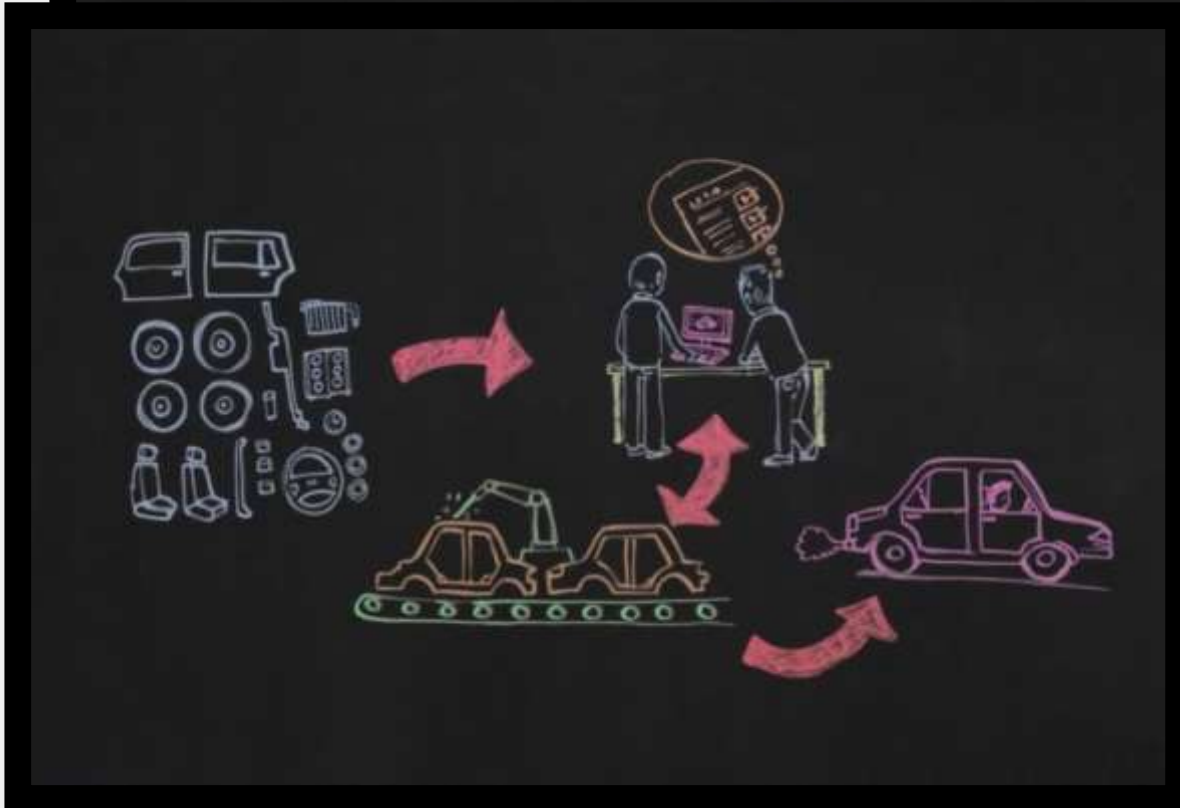
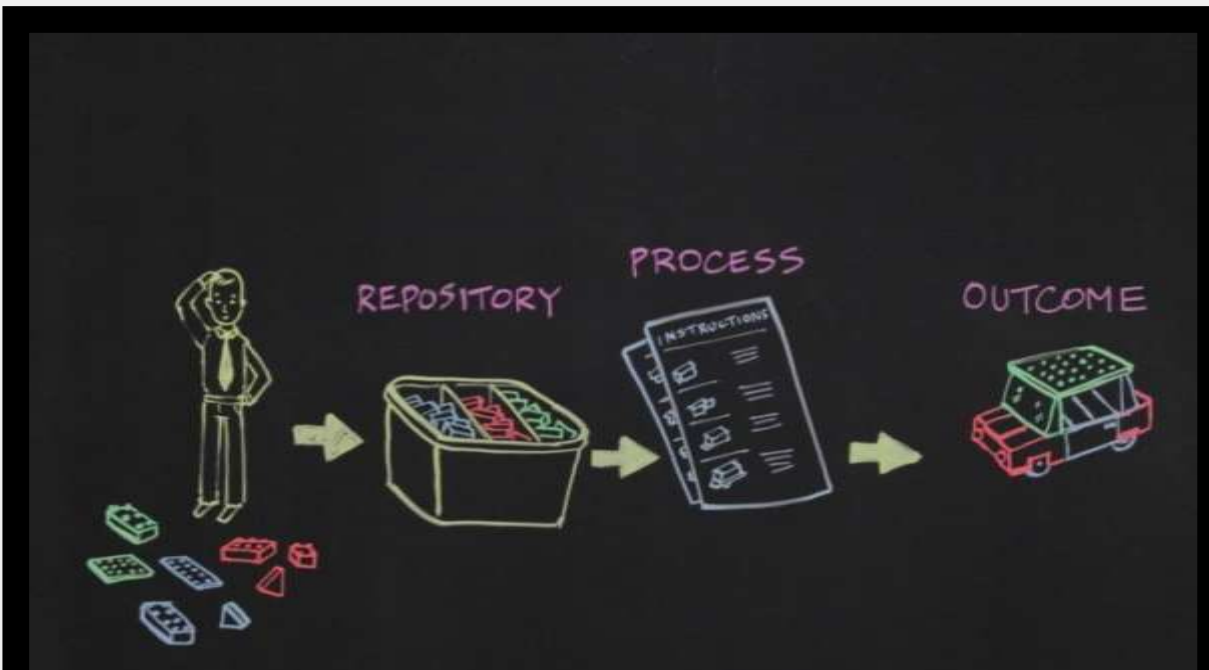
- › A completion certificate will be issued after assessment
- › Attendees can view the videos at their own leisure but are required to complete it before the classroom week.

MOOC Module 1

An Enterprise Architecture Framework

10 Topics PLUS Assessment

- › Topic 1: Welcome
- › Topic 2: What is Enterprise Architecture?
- › Topic 3: What is a framework?
- › Topic 4: Introducing TOGAF
- › Topic 5: Organising building blocks
- › Topic 6: Establishing a common language
- › Topic 7: Managing architecture knowledge
- › Topic 8: Creating and using building blocks
- › Topic 9: Visualising the building blocks
- › Topic 10: Capability based planning

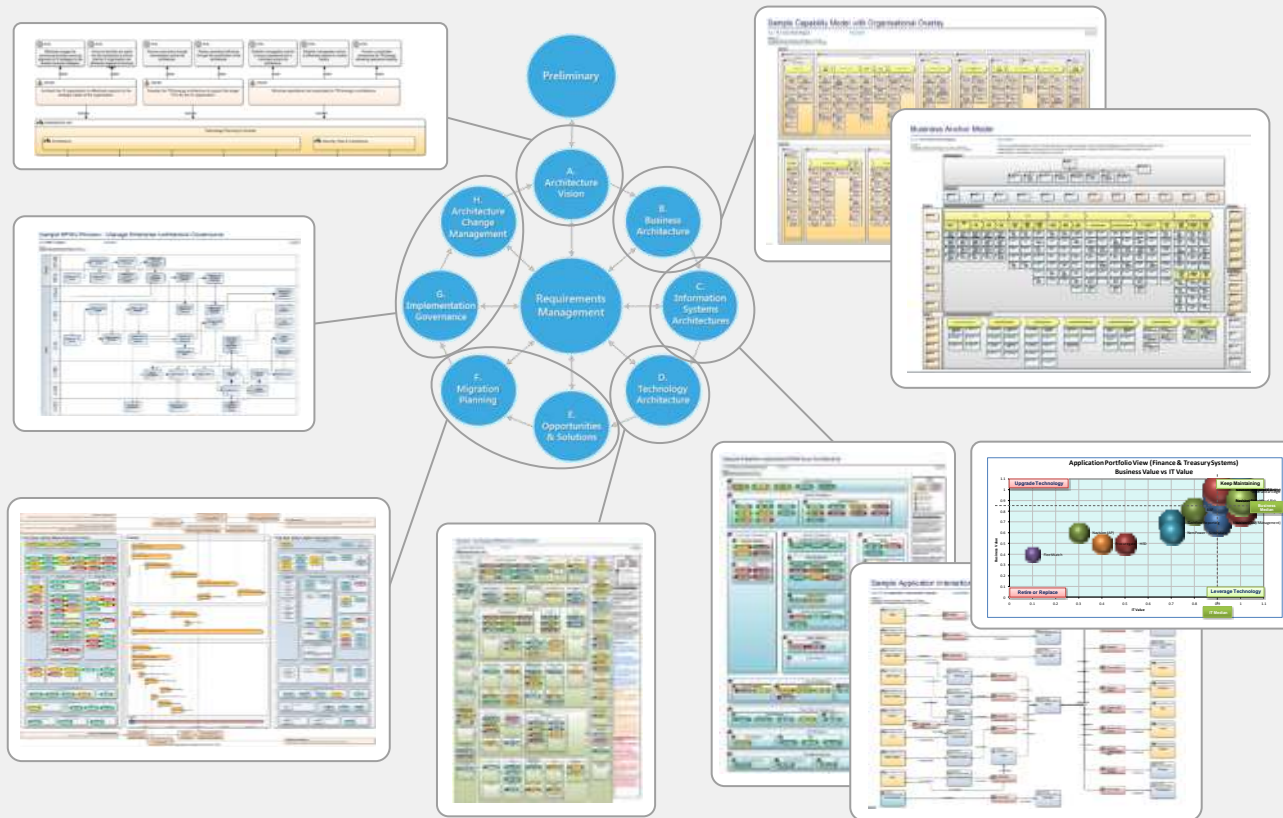


MOOC Module 2

Enterprise Architecture Development

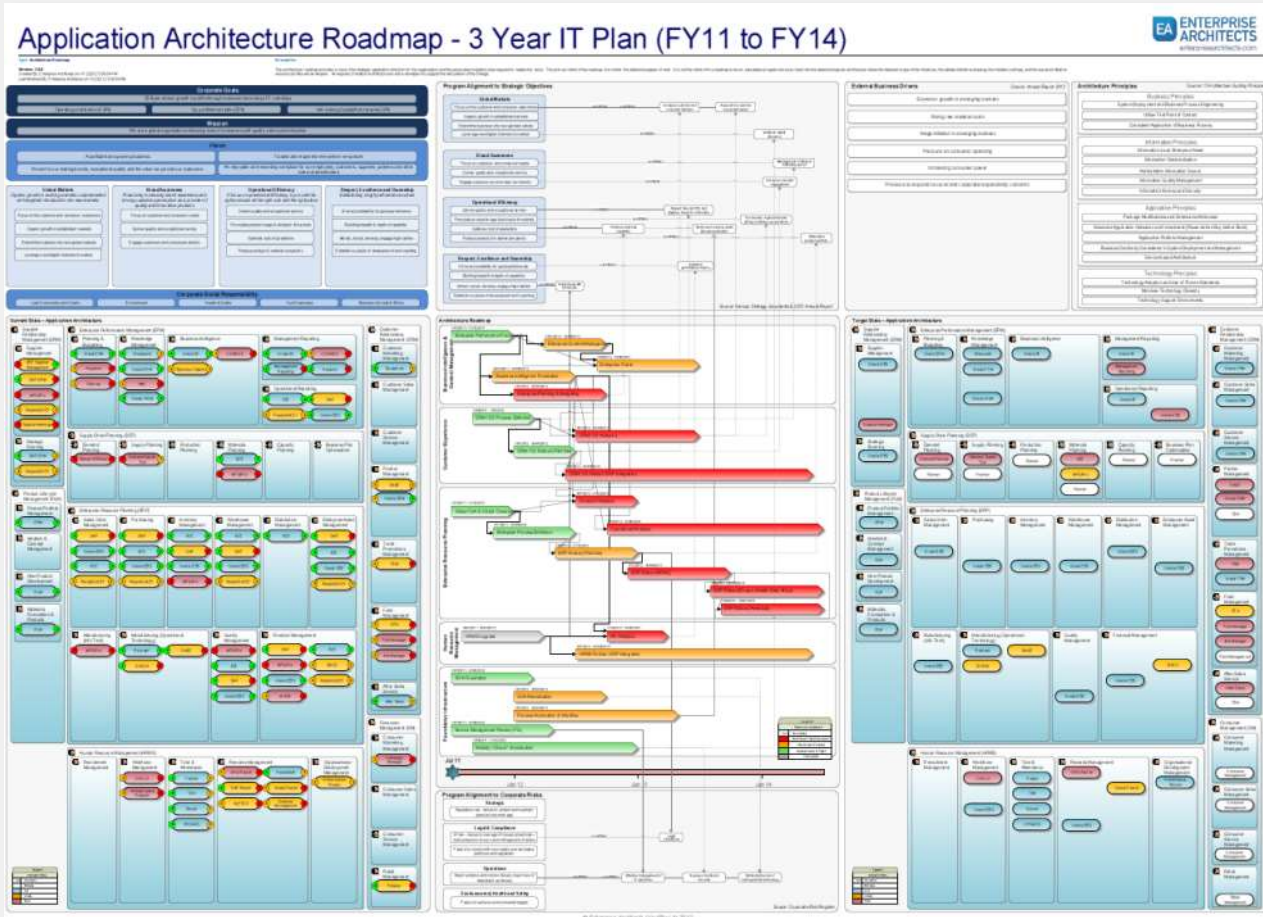
9 Topics PLUS Assessment

- › Topic 1: Dealing with complexity
- › Topic 2: ADM iterations
- › Topic 3: Establishing a vision
- › Topic 4: View, viewpoints and concerns
- › Topic 5: The architecture development iteration
- › Topic 6: Business scenario technique
- › Topic 7: Developing business architecture
- › Topic 8: Developing data architecture
- › Topic 9: Developing application architecture
- › Topic 10: Developing technology architecture



MOOC Module 3

Transformation Planning

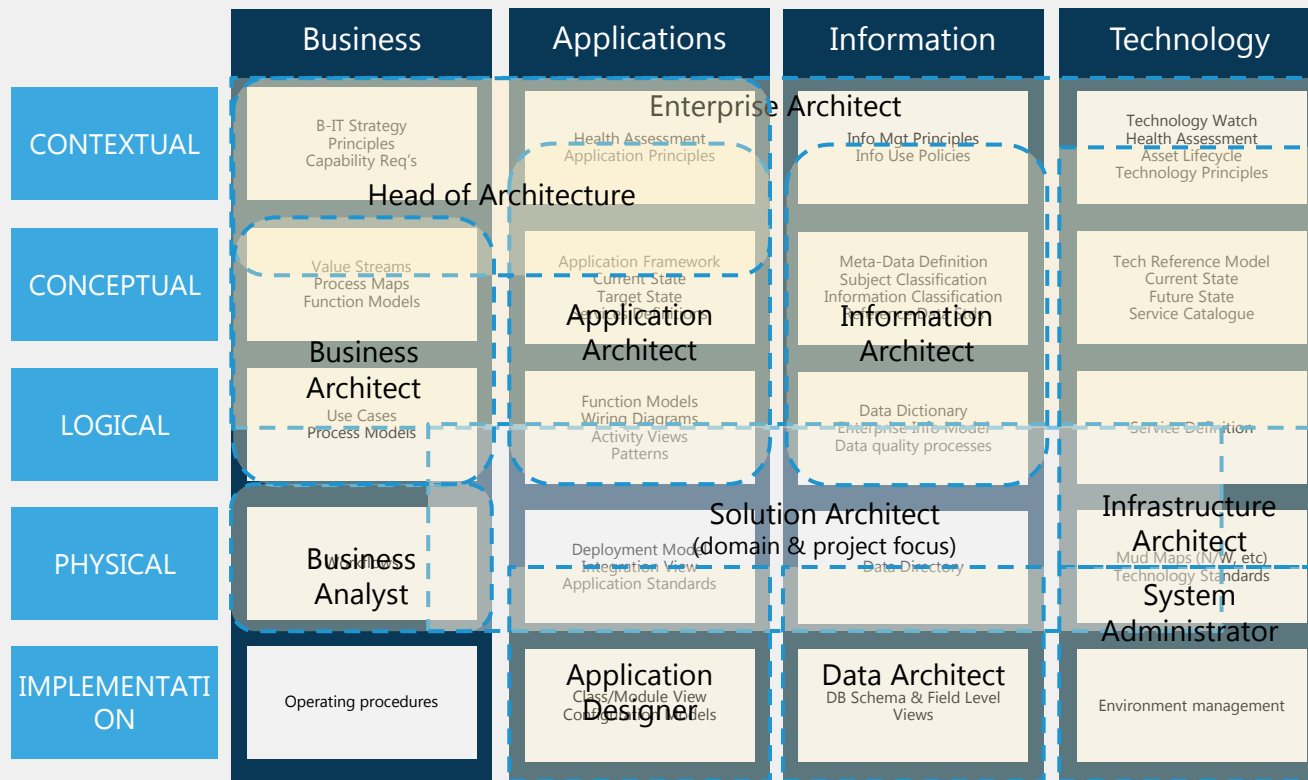


8 Topics PLUS Assessment

- › Topic 1: The architecture transition iteration
- › Topic 2: Identifying business opportunities and solutions
- › Topic 3: Implementation techniques
- › Topic 4: Migration planning
- › Topic 5: Implementation governance
- › Topic 6: The realisation iteration
- › Topic 7: Architecture change management
- › Topic 8: Requirements management
- › Topic 9: The role of business analysis

MOOC Module 4

Establishing an Architecture Practice



8 Topics PLUS Assessment

- › Topic 1: Developing a capability
- › Topic 2: The mandate
- › Topic 3: The governance structure
- › Topic 4: Improving the maturity
- › Topic 5: Understanding roles and skills
- › Topic 6: Career paths for enterprise architects
- › Topic 7: Example: SOA as an architectural style
- › Topic 8: Summary

A man in a white shirt and tie is sitting on the grass, leaning against a tree. He has his hands behind his head and a laptop on his lap. He is looking out over a scenic landscape with mountains and a lake. The text "Where to from here?" is overlaid on the image.

Where to
from here?



Where to next?

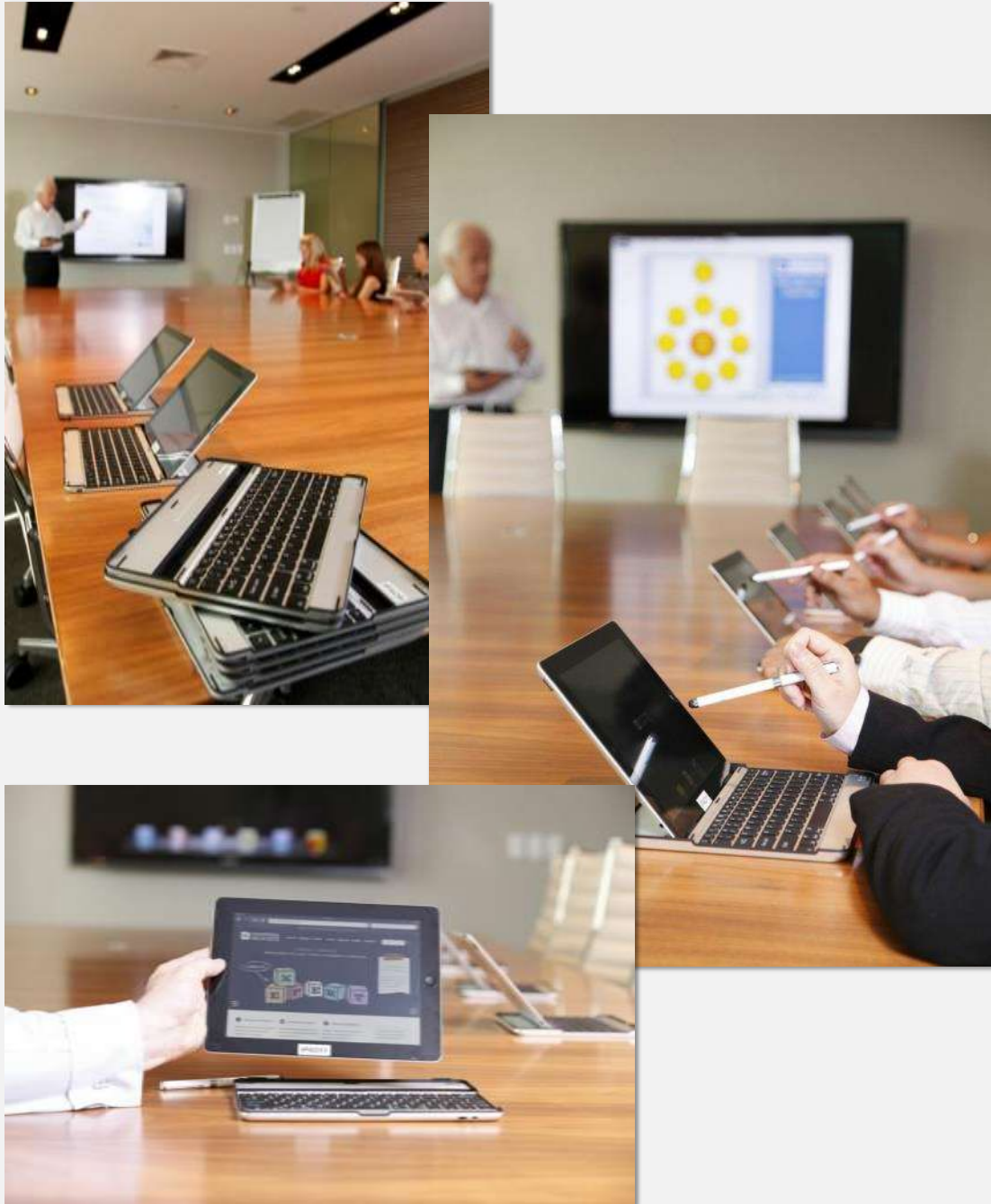
CONTINUING THE ..ISM JOURNEY

- › Teams, peer-to-peer
- › Engagement & experience
- › Visual & kinesthetic
- › Things that matter

The store of wisdom does not consist of hard coins which keep their shape as they pass from hand to hand; it consists of ideas and doctrines whose meanings change with the minds that entertain them.

JOHN PLAMENATZ

(1912-1975, MONTENEGRIN POLITICAL PHILOSOPHER)



Phase 2 – F2F

Theory

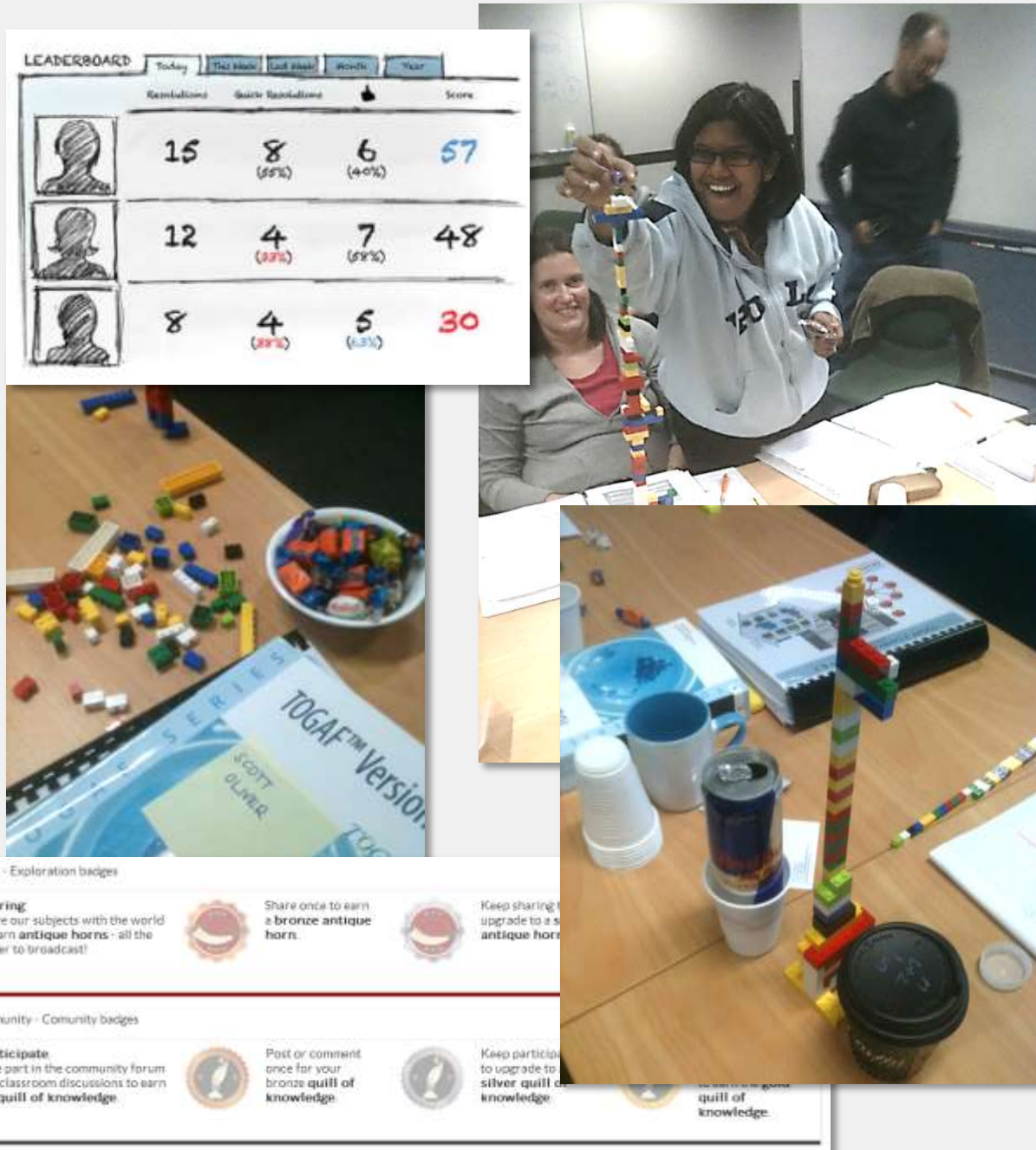
Two Day Classroom intensive. Theory covering the basic learning objectives of TOGAF

- › Module 1 – Introduction into the TOGAF Framework
 - » Context setting and landscape of the TOGAF framework
- › Module 2 – Organizing Architecture Content
 - » A detailed view of the various mechanisms for organizing architecture content using the continuum, repository, metamodel and content framework
- › Module 3 – Tools and Techniques
 - » An overview of governance, business scenarios, stakeholder management, building blocks, maturity models, capability based planning, partitioning and iteration
- › Module 4 – Developing Architectures
 - » A full spin through all the phases of the ADM addressing all the key learning outcomes
- › Module 5 – Building Architecture Capability
 - » A look at how to build architecture teams and skills

Phase 3 – Interactive Workshops

Three day interactive, practical workshops taking the attendees through a hands on business problem




- › An interactive workshop environment using tools and techniques to teach attendees how to execute a TOGAF ADM cycle
- › The use of team dynamics and breakouts to develop a strategic and segment architecture for a corporation
- › Complemented by examples and actual artefacts from similar engagements



Phase 3 – Interactive Workshops

Day 1 – Example Format

- › Individual leaderboard scores attendees TOPICS to prepare them for the TOGAF exam
- › Team leaderboard scores team based on problem resolution using TOGAF techniques

LEADERBOARD					
	Today	This Week	Last Week	Month	Year
	Resolutions	Quick Resolutions			Score
	15	8 (55%)	6 (40%)		57
	12	4 (33%)	7 (58%)		48
	8	4 (50%)	5 (63%)		30



- › Brief team on strengths and weaknesses from personality profiles
- › Communicate business problem
- › Provide the completed request for architecture work




- › Design the architecture landscape to address the business problem
- › Recommend potential architecture partitions
- › Complete the maturity model and plan roadmap for the EA transition
- › Develop a draft metamodel
- › Source potential content into the continuum and repository
- › Score individuals through peer and facilitator scoring
- › Develop teaming model based on initial scores



- › Team 1 - develop the business motivation model
- › Team 2 – develop the draft architecture vision document and statement of architecture work
- › All teams develop business scenarios based on the motivation model
- › Teams break up and focus on the development of the architecture vision across the BDAT
- › Each team develops a skeleton statement of architecture work and includes estimates and efforts
- › Teams score each others efforts – the course leaderboard is updated at each completion stage
 - » Rewards badges are issued to individuals at team level.
- › Team 1 develops future state business capability model
- › Team 2 develops current state business capability model
- › Team 3 develops views and viewpoints
- › Team 4 develops reference models



What can you do?

- 
- › Make learning interactive & experiential
 - › Consider peer-to-peer approaches
 - › Utilize real-world applications
 - › Emphasize information literacy in courses
 - › Encourage reflection
 - › Incorporate collaborative learning
 - › Use informal learning opportunities
 - › Create opportunities for synthesis

Find the right balance



action | *reflection*

visual | *text*

social | *individual*

process | *content*

speed | *deliberation*

peer-to-peer | *peer review*



Register for the TOGAF Open2Study MOOC

<https://www.open2study.com/subjects/introduction-to-enterprise-architecture>



Questions?